

**80/237/MCR****MAINTENANCE CYCLE REPORT**

IEC/TC or SC 80	Date of circulation 1999-08
Title of the TC or SC concerned Maritime navigation and radiocommunication equipment and systems	
Publication number: IEC 61174	Original publication date: 1998-08

Title of publication: Maritime navigation and radiocommunication equipment and systems - Electronic chart display and information system (ECDIS) - Operational and performance requirements, methods of testing and required test results.

The Maintenance Team makes the following recommendation for the above publication (check one of the alternatives)

☐ **The publication is reconfirmed and the next review will take place in**

☐ **The publication is to be withdrawn**
Reasons for the withdrawal:

Date of withdrawal*:

National Committees objecting to this decision should inform Central Office within three months.

☒ **The publication is to be revised and will be included in the work programme with the following title:**

Maritime navigation and radio communication equipment and systems - Electronic chart display and information system (ECDIS) - Operational and performance requirements, methods of testing and required test results. (Second edition)

(Titre F):

☐ **The publication is to be amended and will be included in the work programme**

Name, address and e-mail of project leader Lt Dan Mades USCG Navigation Center, 7323 Telegraph Road, Alexandria, VA 22315-3940, USA . E-mail dmades@navcen.uscg.mil

Project plan:

Proposed target date for submission of a	CD:	CDV: 2000-07	FDIS: 2001-04	Date of publication as an is: 2001-09
------------------------------------------	-----	--------------	---------------	----------------------------------------------

The date and place of the next MT meeting are: or arrangements for electronic operations are annexed ☒.

Secretariat United Kingdom	Name or signature of secretary P F C Griffiths (1999-07-28)
-------------------------------	-------------------------------------------------------------------

* Normally the date given in the maintenance cycle approved by the Committee of Action
FORM 11 (IEC)
1999-05-15



INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No.80: Maritime navigation and radiocommunication equipment and systems

Maintenance Team (MT) for IEC 61174 (1998-08, Electronic chart display and information system, ECDIS)

Report of the first meeting held in London at CIRM headquarters 7th July 1999.

1 Approval of the Agenda

The draft agenda was approved with a change that item 3, the election of project leader and Convenor was moved to after item 4, the Identification of tasks. The attendance list is attached.

2 Rules for Maintenance Teams

2.1 Dr Norris, Chairman of IEC TC80 welcomed everyone to the meeting and highlighted the importance of the work of the Maintenance Team (MT) especially with regard to the quick introduction of RCDS in line with the IMO performance Standard.

2.2 Mr Rambaut (future Secretary of IEC TC80) went through the procedure for Maintenance Teams, indicating the documentation requirements and time scales. He stressed that in this case, it was important to identify the work items clearly and stick to them, he pointed out that a maintenance team was not an excuse for a rewrite of the standard.

3 Identification of the maintenance tasks

3.1 Three papers were submitted outlining a recommended work programme. The first was from Lee Alexander (former Chairman of WG7) (61174 MG 1/1). Hans-Karl von Arnim (Germany - BSH) presented the second (61174 MG 1/2) and Hannu Pieponnen (Finland - Aspo Systems) presented the third (61174 MG 1/3)

3.2 From these documents and after some discussion a list was drawn up of the key areas of work:

- 1 Incorporation of RCDS;
- 2 Incorporation of IMO back-up arrangements;
- 3 Updating of the Navigation related symbols;
- 4 Colours and symbols;
- 5 ENC - Test data set problems;
- 6 Encryption issues;
- 7 Miscellaneous improvements.

3.3 Looking at these items in detail:

3.3.1. Incorporation of RCDS

It was understood that now IMO had incorporated the RCDS option into the IMO resolution on ECDIS, that it was necessary to incorporate the requirement and suitable tests into the IEC standard. Some discussion took place about the format for the data and it was decided that

currently the two systems in use were British Admiralty and NOAA, and tests should be limited to these two only.

3.3.2. Incorporation of IMO Back-up arrangements

This item caused much discussion, mostly centred on the question of whether the IMO term ECDIS incorporated the hardware for back-up or only suitable interfaces. Some team members believed that as Paper Charts may be used as back-up, no testing was necessary in this area. However, others believed that during type testing this facility should be checked at least with regard to passing planned routes electronically to another device. It was eventually decided that the MT could do no more than try to draft tests to meet the current IMO requirement.

3.3.3. Navigation related symbols

The MT were made aware that as other equipment was being developed, especially the UAIS, the symbols in the presentation library were being changed. It was clear that any work in this area would not meet the time-scales envisaged for this project. However, the work should be progressed with a future revision in mind. Lee Alexander presented a paper on symbols for use with AIS. (61174 MG 1/4)

3.3.4 Colours and Symbols

It was made clear to the MT, that the problem here was the very difficult Colour Calibration Procedure indicated for test and production. It was felt that the tolerances specified in the IHO S52 were difficult to meet, and that these had been carried over into 61174. It was decided to develop easier limits without compromising the performance. The result should be fed back to IHO.

3.3.5 ENC - Test data set

A number of the inputs mentioned above were about problems with the Test data set. It was decided to pass these problems to IHO for clarification and to task IHO to provide a new Test data set (TDS) incorporating such items found to be a problem, e.g., date-start and date-end objects.

3.3.6 Encryption

It was well understood by the MT that some ENC data was proposed to be supplied in an encrypted form. The reasons for this are not within the remit of the MT. However, it would make testing difficult if a number of different encryption systems were to be used. After some discussion it was decided to leave the IEC standard as it was for S57 data only and keep a watching brief through IHO on encryption for a future revision of the standard.

3.3.7 Miscellaneous improvements

It was decided that a small team should re-read the current standard and report any other anomalies without being tempted to develop a revision.

4 Election of Project leader and Convenor

4.1 With the scope of work complete, the MT then looked at the appointment of a Convenor and Project Leader. Lt Dan Mades of the US Coast Guard had volunteered for this work and the team all agreed. (Note that IEC Form 11 only records the Project leader and that has been stated as Dan Mades)

4.2 It was decided that each task above needed a leader and after some discussion, members were appointed. These are recorded in the agreed scope of work attached.

5 Project Plan

After discussion with the task leaders, the first milestone was deemed to be mid-September 1999 for drafts of changes to be on an IEC ftp site. The second will be at the end of April 2000, for final drafts from each team, for incorporation into the revised standard. Based on this time-scale, it was felt that final drafting could be complete and checked for submission as a CDV to Geneva by July 2000.

NOTE – The ftp site will be organised by Mike Rambaut and members will be informed as soon as it is available.

6 Working arrangements

These were discussed and everyone agreed that by using ftp and e-mail it should not be necessary to have another meeting until at least the CDV draft was available. This decision would be left to the Project leader.

7 Any other business

There was none. The meeting was closed by Dr Norris who thanked everyone for their co-operation.

M Rambaut/19 July 1999

[Version 2 – edited by P F C Griffiths – 27 July 1999]

Agreed scope of work

	Task	Task Leader
1	Incorporate the requirement and testing of RCDS, limit the data format to British Admiralty or NOAA.	Chris Drinkwater
2	Write tests for Annex 6 of the IMO performance standard for back up arrangements.	Per Larsen
3	Study the navigation related symbols, for a future edition.	Lee Alexander
4	Re-write the colour calibration procedure to be laboratory, production and service friendly and feed back the results to IHO.	Hannu Pieponen
5	Look at references within 61174 to the Test data set and identify problems and changes required and feed back the results to IHO for incorporation into S52.	Neil Guy
6	Keep a watching brief on encryption with IHO for possible inclusion in a later edition.	Neil Guy
7	Review current standard for other minor problems and change where necessary.	Martin Taylor

Maintenance Team for IEC 61174 (1998-08, Electronic chart display and information system, ECDIS)

Attendance list for the first meeting, held in London at CIRM headquarters - 7th July 1999.

Name	Organisation	Country	e-mail
Andy Norris	Chairman IEC TC80	UK	andy.norris@chartco.com
Michael Rambaut	IEC TC80	CIRM	cirm@btinternet.com
Neil Guy	IHB	IHO	dir1@ihb.mc
Eve Clark	Offshore Systems	Canada	eclark@osl.com
Hannu Peiponen	ASPO	Finland	hpeiponen@asposys.fi
Hans-Karl v Arnim	BSH	Germany	hans-karl.arnim@bsh.d400.de
Bernd Michaelsen	STN Atlas Mar Elec	Germany	michaelsen.b@stn-atlas.de
Mizuho Katayama	EIAJ/Tokimec	Japan	m-katayama@tokimec.co.jp
Per Larsen	DNV	Norway	per.larsen@dnv.com
Jan Arild Makalsen	Kongsberg Simrad	Norway	jan.arild.mikalsen@kongsberg.simrad.no
Chris Drinkwater	UKHO	UK	drinkwater@hydro.gov.uk
Martin Taylor	Kelvin Hughes	UK	martin.s.taylor@kelvinhughes.co.uk
Lee Alexander	P&H Marine Assoc.	USA	lalex@nh.ultranet.com
Dave Enabnit	NOAA	USA	dave.enabnit@noaa.gov
Dan Ronan	USCG	USA	dronan@actny.uscg.mil

Other Members not able to attend

Capt Bill Adams	RTCM	USA	wtadams@rtcm.org
Tor Svanes	C-Map	Italy	svanes@c-map.no
Dan Mades	USCG	USA	dmades@navcen.uscg.mil